Amendment "B" page 2 of 7 10/658,168

DOCKET NO. 03-0485 81578(6653)

Amendment to the Claims:

1-4 (canceled)

- 5 (currently amended): A method of qualifying a process tool comprising steps of:
- (a) finding a plurality of pre-scan defect locations on a surface of a semiconductor wafer;
- (b) subjecting the semiconductor wafer to processing by a process tool after step (a);
- (c) finding a plurality of post-scan defect locations on the surface of the semiconductor wafer after step (b);
- (d) calculating which defects were added by the process tool from the pre-scan defect locations and the post-scan defect locations;
- (e) displaying a scatter plot of a point representative of a total number of defects added by the process tool to the semiconductor wafer; and
- (f) The method of Claim 3 further comprising a step of selecting the point on the scatter plot to initiate a display of one of a pre-test wafer map, a post-test wafer map, and an added defect map of defects added by the process tool to the semiconductor wafer.
- 6 (previously presented): The method of Claim 5 further comprising a step of associating a spatial signature of added defects from the added defect map with a process tool malfunction.
 - 7 (canceled)
 - 8 (currently amended): A method of qualifying a

Amendment "B" page 3 of 7 10/658,168

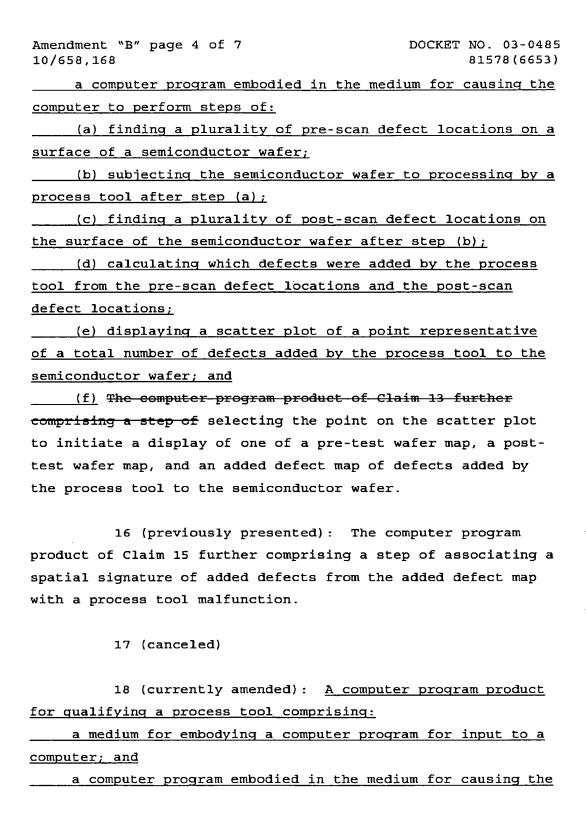
DOCKET NO. 03-0485 81578 (6653)

process tool comprising steps of:

- (a) finding a plurality of pre-scan defect locations on a surface of a semiconductor wafer;
- (b) subjecting the semiconductor wafer to processing by a process tool after step (a);
- (c) finding a plurality of post-scan defect locations on the surface of the semiconductor wafer after step (b);
- (d) calculating which defects were added by the process tool from the pre-scan defect locations and the post-scan defect locations by comparing a distance between a first point corresponding to a defect location in a first list of pre-test defect locations and a second point corresponding to a defect location in a second list of post-test defect locations with a registration tolerance; and
- (e) marking The method of Claim 7 wherein the defect location in the second list corresponding to the second point is marked as a non-adder when [[if]] the distance is less than the registration tolerance.
- 9 (original): The method of Claim 8 wherein the first list and the second list are sorted by X-coordinate.
- 10 (original): The method of Claim 9 wherein defect locations in the first list and the second list having identical X-coordinates are further sorted by Y-coordinate.

11-14 (canceled)

- 15 (currently amended): A computer program product for qualifying a process tool comprising:
- a medium for embodying a computer program for input to a computer; and



Amendment "B" page 5 of 7 10/658,168

DOCKET NO. 03-0485 81578 (6653)

computer to perform steps of:

- (a) finding a plurality of pre-scan defect locations on a surface of a semiconductor wafer;
- (b) subjecting the semiconductor wafer to processing by a process tool after step (a);
- (c) finding a plurality of post-scan defect locations on the surface of the semiconductor wafer after step (b);
- (d) calculating which defects were added by the process tool from the pre-scan defect locations and the post-scan defect locations by comparing a distance between a first point corresponding to a defect location in a first list of pre-test defect locations and a second point corresponding to a defect location in a second list of post-test defect locations with a registration tolerance; and
- (e) marking The computer program product of Claim 17 wherein the defect location in the second list corresponding to the second point is marked as a non-adder when [[if]] the distance is less than the registration tolerance.
- 19 (original): The computer program product of Claim 18 wherein the first list and the second list are sorted by X-coordinate.
- 20 (original): The computer program product of Claim 19 wherein defect locations in the first list and the second list having identical X-coordinates are further sorted by Y-coordinate.